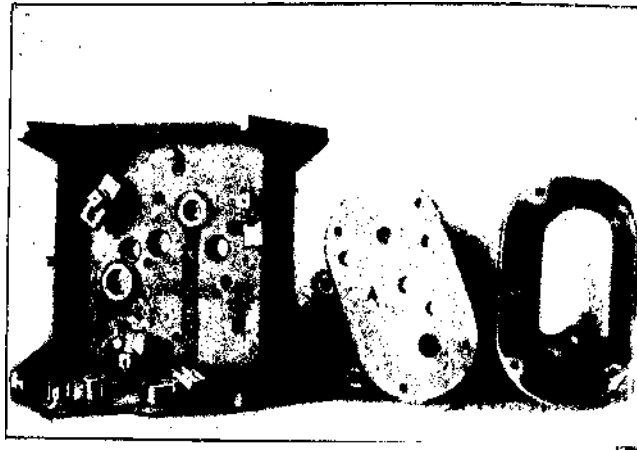


when drilling, three dowel pins, set-screws for bringing the work up against the dowel pins, three clamps, and the necessary bushings. The heads of all the set-screws and bolts should, if possible, be made the same size, so that the same wrench may be used for tightening and unscrewing all of them. It can also be plainly seen from the halftones that there are no unnecessarily finished surfaces on the jig, a matter which is highly important in economical production of tools.

Another example of an open drill jig, similar in design to the one just described, is shown in Fig. 13. The work to be drilled



Kg. 13. Drill Jig Used for Drilling Work shown to the Right

in this jig is shown at *A* and *B* at the right-hand side of the jig. In this case, the work is located from the half-circular ends*. The pieces *A* and *B* are component parts and, when finished, are screwed together. The piece *A* is located against three dowel pins, and pushed against them by set-screws *C*, and held in position by three clamping straps, as shown in Fig. 14. In this case, the straps are provided with oblong slots as indicated, and when the clamp screws are loosened the clamps are simply pulled backward, permitting the insertion and removal of the work without interference. It would improve this clamping arrangement to place a stiff helical spring around the screws under each strap, so that the straps would be prevented from falling down to